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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,899	05/24/2001	Gerard Reynaud	208822US6XPC	3169

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ALEXANDRIA, VA 22314

EXAMINER
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EREZO, DARWIN P

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/831,899

Applicant(s)

REYNAUD, GERARD

Examiner

Darwin P. Erez

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 10-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10, 14, 16-18, 23-26, 30, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,572,990 to Berlin in view of US 3,633,705 to Teder.

(claims 17 and 25) Berlin teaches a mask having a flexible cap **10**; an exhalation port **40** pierced through the cap; a housing **39** on an inner surface of the flexible cap (Fig. 2); first microphone capsule **50** positioned above the exhalation port; an arm extending from within the housing and supporting the microphone capsule (seen in Fig. 2, the circuit board acts as an arm, with a portion located within the housing and another portion outside the housing which holds microphone **50**). Berlin is silent with regards to the microphone capsule mounted on a conical tubular mouthpiece.

Teder teaches that it is known in the art for a microphone **24** to have a tubular mouthpiece **28** for substantially reducing the level of background noise picked up by the microphone.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Berlin to include a tubular mouthpiece, as taught by Teder, because having a conical tubular mouthpiece reduces the level of background noise picked up without decreasing the response of the microphone (col. 2, lines 42-73; Teder). Furthermore, having a conical tubular mouthpiece will direct the sound waves emitted by the user towards the microphone.

(claims 10 and 26) The above combination is silent with regards to an elliptical mouthpiece. However, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use an elliptical aperture because Applicant has not disclosed that an elliptical aperture provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art would have expected Applicant's invention to perform equally well with either the aperture of Berlin/Teder or the claimed elliptical aperture because both type of aperture perform the same function. Therefore, it would have been obvious matter of design choice to modify the device of Berlin/Teder to obtain the invention as specified in claim 10.

(claims 14 and 30) Berlin teaches a cable **16** connected to the microphone capsule.

(claims 16 and 32) Berlin teaches a second microphone capsule **52**.

(claim 18) The above combination of Berlin/Teder teaches a conical mouthpiece, which will inherently have a larger side and a smaller side.

(claim 23) Berlin teaches a body **46** mounted in the housing, and wherein the arm extends from the body to support the mouthpiece.

(claim 24) The above combination will teach the aperture of the conical mouthpiece turned towards a center of a location at which the user 's mouth is adapted to be positioned since Berlin teaches the microphone adjacent the user's mouth (Fig. 3).

4. Claims 19, 20, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlin in view of Teder, and in further view of US 4,718,415 to Bolnberger et al.

The above combination of Berlin/Teder is silent with regards to the specifics of the microphone. However, Bolnberger teaches a microphone capsule for use in a mask, wherein the microphone has an acoustic chamber having a plurality of holes **23** with a high pass filtering capability of about 50-4000 Hz. Therefore, it would have been obvious to one of ordinary skill in the art to use the microphone taught by Bolnberger in the device of Berlin/Teder because any microphone capable of filtering at an audible level can be used in said device.

5. Claims 11, 12, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlin in view of Teder and in further view of US 5,503,141 to Bolnberger et al.

Berlin/Teder is silent with regards to the mouth-piece having a metal lattice acoustic screen positioned in the aperture. Bolnberger discloses a mask having a cloth acoustic screen **32** positioned in a mouth-piece aperture. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an acoustic screen in the device of Berlin/Teder because it protects the microphone capsule from moisture, dust and the like (Bolnberger; col. 5, lines 3-5).

6. Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlin in view of Teder and in further view of US 4,961,420 to Cappa et al.

Berlin/Teder teaches all the limitations of the claims except for a mask further comprising a baffle fixedly joined to the flexible cap and positioned between the microphone capsule and the exhalation port. Cappa teaches a baffle **40** attached to a cap and positioned above an exhalation port. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the baffle of Cappa in the device of Berlin/Teder in order to prevent expired air from penetrating the upper portions of the mask (col. 7, lines 36-43).

7. Claims 15 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlin in view of Teder and in further view of 3,910,269 to Ansite et al.

Berlin/Teder teaches all the limitations of the claim except for a mask further comprising plural catches joined to the flexible cap and mounted substantially perpendicular to an external face of the flexible cap. Ansite teaches a mask having

Art Unit: 3731

plural catches **53** joined to a flexible cap and mounted substantially perpendicular to an external face of the flexible cap. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the plural catches of Ansite to the mask of Bolnberger because it allows the user to use straps to further secure the mask on the user's head.

8. Claims 21, 22 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlin in view of Teder and in further view of US 3,314,424 to Berman.

Berlin/Teder is silent with regards to the device having an adjustable mouthpiece. Berman teaches a mask having a microphone mounted on an adjustable mouth-piece (via element **44**) that is capable of varying from 10-18 mm. Therefore, it would have been obvious to modify the device of Berlin/Teder to include the adjustable means of Berman because it allows the user to move the mouth-piece directly in front of the user's mouth.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 10-35 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin P. Erez who's telephone number is (571) 272-4695. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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GLENN K. DAWSON  
PRIMARY EXAMINER